

REMARKS

Introduction

Claims 1-45 were originally submitted with the application as filed. Claims 1-31 and 37-45 had previously been withdrawn from consideration without prejudice pursuant to a restriction requirement, and have now been cancelled by this Amendment to expedite prosecution. Applicant reserves the right to file one or more divisional applications which include the cancelled claims. Claims 32-36 are now pending in this application. No claims have been allowed.

The undersigned Applicant's representative telephoned the Examiner on December 20, 2004 to discuss this case and to better understand the Examiner's Official Communication of December 9, 2004. Responsive to the telephone interview, the Applicant has removed much of the language in claim 32 that was drawn to the extrudant. The Applicant has nonetheless retained some functional claim language of the apparatus that recites the extrudant. The undersigned wishes to thank the Examiner for the courtesies extended during the telephone interview.

Rejections under 35 U.S.C. § 102

The Examiner has rejected Claim 32 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,013,222 to Douglas, et al. Douglas teaches a method of producing sheet material incorporating particulate matter. In particular, Douglas introduces particulate material from a hopper 13 via a screw feeder 14 with a polymer, the polymer and particulate being blended together in the pump 4. Extruder 3 supplies molten polymer that is incorporated with the polymer containing the particulate matter in a cavity transfer mixer 2 and extruded through blown film die 1.

The two polymer sources, in this case a polymer containing particulate material and another polymer are formed into a molten stream of polymer that is substantially coaxial in order to be properly introduced into the blown film die 1 and exhibit the characteristics that the disclosure of Douglas seeks to manifest. This is detailed in the specification of Douglas that states:

The final mixture then enters the outlet chamber 26 of the CTM 2 where it surrounds the central stream, comprising polymer only, which emerges from the central flow path 24. The output of the mixer thus comprises a *core of polymer surrounded by an outer*

portion comprising a mixture of polymer and particulate, as already described.

(col. 4, ll. 52-57) (emphasis added). This coaxial polymer stream is then fed into blown film die 1 that has a cylindrical opening configured to produce a “bubble” of polymer material.

Applicant has amended claim 32 to recite that “the mixer compris[es] a housing having a first end and a second end and an interior region, the first end configured to receive the first plastic extrudant and the second plastic extrudant and the second end configured to expel the mixture through a plurality of outlets, the mixture and the plurality of outlets being rotated with respect one another as the mixture is expelled” These claimed features are not disclosed by the Douglas patent. Antecedent basis for the amendment can be found in Applicant’s specification, pages 11-12. Applicant submits that the recitation calling for “the mixture and the plurality of outlets being rotated with respect to one another as the mixture is expelled” is acceptable functional claim language. *See In re Schreiber*, 128 F.3d 1473, 1478 (Fed. Cir. 1997) (patent applicant is “free to recite features of an apparatus either structurally or functionally”).

“For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference.” *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677 (Fed. Cir. 1988). The ‘222 patent to Douglas does not teach the apparatus claimed in Applicant’s amended claim 32. Therefore, a § 102 rejection of amended claim 32 is not sustainable. *Id.* Furthermore, the device of Douglas could not be used to produce the product of the present disclosure, nor could it operate as called for in amended claim 32. Applicant therefore respectfully requests that the Examiner withdraw the § 102 rejection over Douglas.

Similarly, the Examiner has rejected claims 32-34 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,542,686 to Bansal. Bansal teaches a method and apparatus for making marbled pet food by merging a red pet food stream with a white pet food stream, partially mixing the merged pet food stream, expressing the partially mixed pet food stream through a shaping die, and cutting the expressed pet food stream into pet food pieces. It is applicant’s contention that, contrary to the Examiner’s view, the device disclosed in Bansal could not produce the product of the present disclosure, but rather might produce small, dog food-shaped chunks of mottled plastic at best and, more likely, amorphous globs of plastic rather than a plastic layer exhibiting a patterned appearance.

Furthermore, Bansal does not disclose that “the mixer compris[es] a housing having a first end and a second end and an interior region, the first end configured to receive the first plastic extrudant and the second plastic extrudant and the second end configured to expel the mixture through a plurality of outlets, the mixture and the plurality of outlets being rotated with respect one another as the mixture is expelled” Bansal therefore cannot anticipate claims 32-34.

Applicant therefore respectfully requests that the Examiner withdraw the § 102 rejections over Douglas and Bansal.

Claim Rejections under 35 U.S.C. § 103

Claims 35-36 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bansal in view of U.S. Patent No. 6,143,342 to Weinstein (hereinafter “Weinstein”). Claims 35-36 include the limitations of independent claim 32, from which they depend.

Bansal’s teachings are summarized above. The ‘342 patent to Weinstein teaches dividing flowing dough with a die dividing member to impart a gap in it that is filled with a second dough and food coloring. With reference to Fig. 3, dividing member 47 creates gaps or passageways 44, 45 and 46. Die insert 20 is configured to add a second dough and food color into the gaps or passageways. In contrast to the disclosure of the Bansal reference, the swirl pattern of Weinstein is not achieved by blending two different materials and rotating them, but instead by forming gaps in one extrudate in the shape of the pattern, and then filling the gaps with a second extrudate and food color.

Applicant submits that the combined teachings of Bansal and Weinstein cannot render Applicant’s claims 35-36 obvious because such combination does not consider all of Applicant’s claim elements. *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) (Board erred by failing to appreciate that the appealed claims can be distinguished over the combination of references). Applicant’s amended claim 32, and thus claims 35 and 36, call for “the mixer comprising a housing having a first end and a second end and an interior region, the first end configured to receive the first plastic extrudant and the second end configured to expel the mixture through a plurality of outlets, the mixture and the plurality of outlets being rotated with respect one another as the mixture is expelled” These claimed features are not disclosed by Bansal, Weinstein, or any combination thereof. Furthermore, claims 35 and 36 call for a plurality of outlets having a first diameter and a plurality of outlets having a second

diameter, and claim 36 adds the dimensional specifics. Bansal and Weinstein alone or in combination do not suggest or even hint at these claimed features. Therefore, Applicant respectfully requests that the Examiner withdraw the rejection. *Id.*

Further, Applicant submits that there is no incentive to combine the teachings of Bansal and Weinstein. *See, e.g., In re Geiger*, 815 F.2d 686, 688 (Fed. Cir. 1987) (obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion, or incentive supporting the combination). While Bansal and Weinstein both produce a patterned extrudate, they each produce such a pattern in entirely different ways, as discussed above. Bansal partially mixes and rotates two extrudates whereas Weinstein teaches forming gaps in one extrudate and filling the gaps with another extrudate. A skilled artisan in search of a better apparatus for producing a patterned extrudate would not combine the teachings of these references because they each teach entirely different methods for producing patterned food products.

Finally, “[i]n order to rely on a reference as a basis for rejection of an Applicant’s invention, the reference must either be in the field of Applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” *See* MPEP § 2141.01(a) at p. 2100-115 (citing *In re Oetiker*, 977 F.2d 1443 (Fed. Cir. 1992)). “A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor’s endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor’s attention in considering his problem.” *Id.* (citing *In re Clay*, 966 F.2d 656,659 (Fed. Cir. 1992)).

Bansal and Weinstein are both outside the field of Applicant’s endeavor. Bansal discloses an apparatus for making extruded pet food nuggets with a meat-like pattern, and Weinstein discloses an apparatus and methods for making multiple, complexly-patterned food products, such as rings, stars, letter, footballs, baseballs and other sports balls. The present disclosure, however, relates to an apparatus for making extruded plastic sheets and laminations thereof. Neither Bansal nor Weinstein relate to making extruded and partially transparent plastic sheets. One of skill in the art in plastic extrusion would not look to equipment for the production of cereal and pet food to address the problems solved by Applicants in creating patterned and partially transparent plastic sheets and laminations thereof.

For at least these reasons, Applicant submits that claims 35 and 36 are patentable over the combination of Bansal and Weinstein.

Final Remarks

Applicant submits that none of the prior art of record discloses or suggests the combination of elements claimed in claims 32-36. Accordingly, Applicant respectfully requests that the Examiner issue a Notice of Allowance in due course.

5 If necessary, please consider this a Petition for Extension of Time to effect a timely response. Please charge any additional fees or credits to the account of Bose McKinney & Evans, LLP Deposit Account No. 02-3223. In the event that there are any questions related to these amendments or to the application in general, the undersigned would appreciate the opportunity to address those questions directly in a telephone interview to expedite the prosecution of this application for all concerned.

10

Respectfully submitted,

BOSE McKINNEY & EVANS LLP



Michael C. Bartol
Registration No. 44,025

Indianapolis, Indiana
(317) 684-5281

580573 2